

CLAIMS

1-47 (*Canceled*)

48. (*new*) A method comprising encoding on computer-readable media a video stream so that the encoded video stream includes a series of temporal layers including a first temporal layer in which all frames are A-frames, each A-frame being an I-frame or a P-frame, and plural succeeding temporal layers in which all frames are B-frames, said temporal layers being composed and arranged so that a temporal resolution can be selected as a function of a whole number of said succeeding layers truncated from an end of said series.

49. (*new*) A method as recited in Claim 48 wherein no two temporally adjacent frames are in the same one of said temporal layers.

50. (*new*) A method as recited in Claim 48 wherein said encoded video stream includes a table of contents indicating an offset for each frame included in said encoded video stream.

51. (*new*) A method as recited in Claim 48 wherein:

said encoding involves wavelet encoding; and
for each of said temporal layers, data is arranged in spatial layers so that a spatial resolution can be selected by truncating a whole number of spatial layers from respective ends of at least some of said temporal layers, said B-frames being wavelet encoded.

52. (*new*) A method as recited in Claim 51 wherein, for each of said spatial layers, data is arranged in signal-to-noise layers so that a signal-to-noise ratio can be selected by truncating a whole number of said

signal-to-noise layers from respective ends of at least some of said spatial layers.

53. (*new*) A method as recited in Claim 52 wherein said encoded video stream is of one of plural such streams collectively arranged in a series interactivity layers so that a level of interactivity can be selected by truncating a whole number of said interactivity layers from said series of interactivity layers.

54. (*new*) The product produced by the method of Claim 1.

55. (*new*) A system comprising:

computer readable storage media; and
an encoder for encoding on said media a video stream so that the encoded video stream includes a series of temporal layers including a first temporal layer in which all frames are A-frames, each A-frame being an I-frame or a P-frame, and plural succeeding temporal layers in which all frames are B-frames, no two temporally adjacent frames being in the same temporal layer.

56. (*new*) A system as recited in Claim 55 wherein said layers are composed and arranged so that a temporal resolution can be selected by truncating a whole number of layers including B-frames from the end of said series.

57. (*new*) A system as recited in Claim 55 wherein said encoded video stream includes a table of contents indicating an offset for each frame included in said encoded video stream.

58. *(new)* A system as recited in Claim 1 wherein:

 said encoding involves wavelet encoding; and

 for each of said temporal layers, data is arranged in spatial layers so that a spatial resolution can be selected as a function of a whole number of spatial layers from each of said temporal layers.

59. *(new)* A system as recited in Claim 58 wherein, for each of said spatial layers, data is arranged in signal-to-noise layers so that a signal-to-noise ratio can be selected by truncating the respective spatial layer.

60. *(new)* A system as recited in Claim 59 wherein said encoded video stream of one of plural such streams collectively arranged in a series interactivity layers so that a level of interactivity can be selected can be selected by truncating said series of interactivity layers.

61. *(new)* A method comprising:

 accessing video sequentially arranged video data having a table of contents and a series of temporal layers, said series having a first temporal layers in which all frames are A-frames, each A-frame being an I-frame or a P-frame, all frames in plural succeeding temporal layers being B-frames arranged so that no two temporally adjacent B-frames are in the same temporal layer;

 predecoding said A-frames; and

 in response to a request for a frame,

 if the requested frame is an A-frame, looking up an offset for said A-frame in said table of contents and accessing said A-frame at said offset, and

if the requested frame is a B-frame, looking up offsets for said B-frame in said table of contents and decoding said B-frame in part as a function of pre-decoded A-frame data.

62. (*new*) A method as recited in Claim 61 wherein said table of contents precedes said first temporal layer.

63. (*new*) A method as recited in Claim 61 further comprising selecting a temporal resolution by truncating a whole number of said succeeding layers from said encoded video stream.

64. (*new*) A method as recited in Claim 63 further comprising selecting a spatial resolution by truncating spatial layers from the end of each of said temporal layers that has not been removed due to truncation, each of said temporal layers including a series of spatial layers.

65. (*new*) A method as recited in Claim 64 further comprising selecting a signal-to-noise ratio by truncating each of said spatial layers that has not been removed due to truncation.

66. (*new*) A method as recited in Claim 62 further comprising:
accessing additional video streams that collectively with said video stream define a series of interactivity layers; and
selecting a level of interactivity by truncating a whole number of said interactivity layers from said series of interactivity layers.

67. (*new*) A system comprising:

computer-readable storage media encoded with a compressed video stream; and

a decoder for accessing a video stream having a table of contents and a series of temporal layers, said series having a first temporal layer in which all frames are A-frames, each A-frame being an I-frame or a P-frame, all frames in a series of plural succeeding temporal layers being B-frames, said B-frames being arranged in said succeeding temporal layers so that a temporal resolution can be selected as a function of a whole number of said succeeding temporal layers truncated from the end of said encoded video stream, said decoder providing for predecoding said A-frames and, in response to a request for a frame,

if the requested frame is an A-frame, looking up an offset for said A-frame in said table of contents and accessing said A-frame at said offset, and

if the requested frame is a B-frame, looking up offsets for said B-frame in said table of contents and decoding said B-frame in part as a function of pre-decoded A-frame data.

68. (*new*) A method as recited in Claim 67 further comprising selecting a temporal resolution by truncating a whole number of said succeeding layers from said encoded video stream.

69. (*new*) A method as recited in Claim 67 further comprising selecting a spatial resolution by truncating spatial layers from the end of each of said temporal layers that has not been removed due to truncation, each of said temporal layers including a series of spatial layers.

70. (*new*) A method as recited in Claim 69 further comprising selecting a signal-to-noise ratio by truncating each of said spatial layers that has not been removed due to truncation.

71. (*new*) A method as recited in Claim 70 further comprising:
accessing additional video streams that collectively with said video stream define a series of interactivity layers; and
selecting a level of interactivity by truncating a whole number of said interactivity layers from said series of interactivity layers.

72. (*new*) A computer product comprising computer-readable storage media encoded with video data organized in part as a series of frames wherein all A-frames precede all B-frames, wherein each A-frame is an I-frame or a P-frame, said B-frames being arranged in a series of plural temporal layers so that a temporal resolution can be selected as a function of a whole number of said temporal layers truncated from an end of said series of plural temporal layers.

73. (*new*) A computer product as recited in Claim 72 wherein said A-frames are uncompressed and said B-frames are compressed.

74. (*new*) A computer product as recited in Claim 72 wherein said video data further includes a table of contents associating each of said A and B-frames with one or more offsets corresponding to locations of data associated with the frame.

75. (*new*) A computer product as recited in Claim 72 wherein said frames are arranged in a series of layers such that any two temporally adjacent frames are located in different layers.

76. (*new*) A computer product as recited in Claim 72 wherein each of said temporal layers is divided into a series of plural spatial layers so that a spatial resolution can be selected as a function of a whole number of spatial layers truncated from an end of each of said temporal layers, said B-frames being wavelet compressed and said A-frames being not wavelet compressed.

77. (*new*) A computer product as recited in Claim 76 wherein each of said spatial layers includes a series of plural signal-to-noise layers such that a signal-to-noise ratio can be selected as a function of a whole number of signal-to-noise layers truncated from said spatial layers.

78. (*new*) A computer product as recited in Claim 72 wherein said video data represents a set of video sequences each of which is divided into temporal layers, said video sequences being arranged in a video series such that a level of interactivity can be selected as a function of a whole number of said video sequences truncated from an end of said video data.